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NRG

Entergy

Exelon.

July 2, 2007

Mr. Howard G. Borgstrom
Director, Business Operations Center
Office of the Chief Financial Officer
U.S. Department of Energy
Mailstop CF-60, Room 4A-221
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: Written Comments in Response to RIN 1901-AB21, Loan Guarantees for Projects that Employ Innovative Technologies, 72 *Federal Register* 27471 (May 16, 2007)

Dear Mr. Borgstrom,

Constellation Energy Group, Inc., Entergy Corporation, Exelon Corporation, and NRG Energy, Inc. respectfully submit and join in the attached Joint Comments, which provide their views and insights regarding the Proposed Rule developed by the United States Department of Energy (DOE) to implement policies and procedures for the loan guarantee program authorized by Title XVII of the Energy Policy Act of 2005. The following attached Joint Comments referencing DOE identifier "RIN 1901-AB21" were invited pursuant to the Notice published by DOE in the *Federal Register* at 72 Fed. Reg. 27472 (May 16, 2007).

In addition to joining in the attached comments, the undersigned have reviewed and endorse the comments submitted on behalf of the nuclear industry by the Nuclear Energy Institute.

Sincerely,

Joe C. Turnage
Senior Vice President
Constellation Energy Group, Inc.

Theodore Bunting, Jr.
Senior Vice President, Finance
Entergy Corporation

John F. Young
Executive Vice President and CFO
Exelon Corporation

Steve Winn
Executive Vice President
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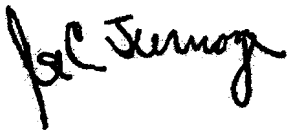

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Joint Comments of

Constellation Energy Group, Inc,

Entergy Corporation,

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and

NRG Energy, Inc.

regarding

Proposed Rule, Loan Guarantees for Projects that Employ Innovative Technologies

72 Federal Register 27471 (May 16, 2007)

RIN 1901-AB21

I. INTRODUCTION

The following Joint Comments are submitted on behalf of Constellation Energy Group, Inc., Entergy Corporation, Exelon Corporation, and NRG Energy, Inc. in order to provide their views and insights regarding the Proposed Rule developed by the United States Department of Energy (DOE) to implement policies and procedures for the loan guarantee program authorized by Title XVII of the Energy Policy Act of 2005 (EPAct 2005). Each of these companies has announced plans to develop advanced nuclear power generation facilities that would qualify for loan guarantees as "advanced nuclear energy facilities" under Section 1703(b) of the EPAct 2005. Each of these companies believes that the availability of loan guarantees under this program is critical to their continued efforts to develop the first new nuclear generating units to be ordered and built in the United States in nearly thirty years. The essential role that loan guarantees play in our plans for new nuclear power is without regard to whether these plans involve developing a facility that would be subject to "cost-of-service" regulation or operated as a "merchant" plant that would sell power at wholesale.

The following written Joint Comments referencing DOE identifier "RIN 1901-AB21" were invited pursuant to the Notice published by DOE at 72 *Federal Register* 27472 (May 16, 2007). In addition, these companies have reviewed and endorse the comments submitted on behalf of the industry by the Nuclear Energy Institute.

II. DISCUSSION OF THE ISSUES CRITICAL TO EVERY NUCLEAR PROJECT

A. The Need For Certainty Regarding the Scope of the Loan Guarantee Program and Availability for New Nuclear Generation Facilities

Following the enactment of the Energy Policy Act of 2005, numerous companies announced plans to develop applications to be submitted to the U.S. Nuclear Regulatory Commission to obtain licenses for the development of new nuclear power generation facilities.

NRC has developed a new "one step" licensing process for nuclear projects, where applicants would receive a combined construction and operating license or "COL," and it is hoped that this will provide a transparent and predictable licensing process which will be demonstrated with the first "wave" of COL applications. These projects involve new nuclear plants using advanced technologies of five advanced reactor designs that promise to be even safer and more reliable than the existing "fleet" of nuclear reactors. In this first stage of development, the companies at the leading edge of development are committing many tens of millions of dollars to the NRC licensing process for COL applications that will be submitted later this year and in 2008. NRC's review process is then expected to take 2-4 years, which would lead to full scale construction activities commencing in the 2009-2012 time-frame for the first units of each new technology type.

Given the nature of the multi-year licensing and construction schedule, as well as the world-wide competition for resources required to build these nuclear plants, companies planning to build the first plants are already beginning the process of committing to these projects what will likely be the first several hundred million dollars for each multi-billion dollar project, and in some cases, companies with their project partners have already spent such amounts. This means that in the near-term, these companies will need to either secure financing or commit equity in order to maintain schedules to prepare for plant construction. Significantly, however, nearly all of these efforts are premised upon the assumption that the promise of Title XVII of EPAct 2005 will be realized for the first wave of new nuclear plants. These companies strongly believe that loan guarantees are necessary to access the credit markets. In addition, for new nuclear facilities that will be subject to cost-of-service regulation, companies will need to demonstrate to state public service commissions that the financing costs for these facilities were prudently incurred.

Simply put, further commitment of capital requires that companies secure confidence that DOE will develop and implement a workable loan guarantee program to provide the badly needed access to large amounts of capital necessary to finance the development of the first 3-5 plants of each of the new reactor designs. For some companies, this may require securing loan guarantee commitments as soon as 2008, shortly after NRC has accepted a COL application as "administratively complete" and "docketed" the application. At a minimum, however, this requires the clear and unambiguous availability of loan guarantees in the 2009-2012 time-frame for a significant number of capital intensive central power generation facilities (new nuclear and clean coal plants). A workable loan guarantee program necessary to support new nuclear power development in the U.S. must have the following three elements:

- The guarantee itself must be a commercially viable financing instrument, in line with other Federal loan guarantee instruments;
- There should be a transparent methodology for calculating the subsidy cost to be paid by sponsors, and such costs should be reasonable and commercially viable; and
- There should be certainty as to the future availability of guarantees, and this self-pay program should be insulated from the uncertainty of the annual appropriations process.

The size and scale of nuclear projects, and the multi-year commitments that need to be made by private industry, make it imperative that DOE create certainty in the near-term around the future availability of the Title XVII Loan Guarantee Program for nuclear power projects. As part of the public-private partnership that has been essential to "jump-starting" the development of new, base-load nuclear generation, the multi-year commitment being made by private parties needs to be matched with a multi-year commitment from the federal government. The federal government cannot expect private parties to make hundreds of millions of dollars in

commitments premised upon the expectation of they will obtain loan guarantees in 2009-2012 without reasonable progress being made by the federal government toward establishing a program that can be expected to be available to facilitate the financing of the first wave of new nuclear plants throughout the next five years.

One solution to this problem has been suggested by the U.S. Government Accountability Office (GAO) which has stated its opinion regarding the application of Section 504(b) of the Federal Credit Reform Act of 1990 (FCRA) to Title XVII. 2 U.S.C. 661c(b). By letter dated April 20, 2007, the GAO articulated the legal basis to conclude that DOE already has the requisite legal authority to issue loan guarantees based upon the payment in full of costs from borrowers without the need for additional authority provided in advance in an annual appropriations Act:

> The language of section 1702(b) [of EPAct 2005] makes clear that Congress contemplated two possible paths for making loan guarantees under title XVII. DOE, consistent with FCRA (2 U.S.C. § 661c(b)), could issue loan guarantees pursuant to appropriations for that purpose (EPACT, § 1702(b)(1)); or DOE could issue loan guarantees if it receives payments by borrowers of the "full cost of the obligation" (EPACT, § 1702(b)(2)). To read section 1702(b) as subjecting title XVII loan guarantees to the requirements of FCRA would read subsection (b)(2) out of the law, and we cannot do that; we have to give meaning to all of the enacted language. *E.g.*, 70 Comp. Gen. 351, 354 (1991); 29 Comp. Gen. 124, 126 (1949). *See also* 2A Sutherland, *Statutory Construction,* § 46:06 at 193–94 (6th ed. 2000). Section 1702(b)(2) is clearly inconsistent with FCRA, and it is a later enacted, more specific law. It is well established that a later enacted, specific statute will typically supersede a conflicting previously enacted, general statute to the extent of the inconsistency. *E.g., Smith v. Robinson,* 468 U.S. 992, 1024 (1984); B-255979, Oct. 30, 1995. For these reasons, we conclude that EPACT section 1702(b)(2) allows DOE to issue loan guarantees if the borrowers pay the "full cost of the obligation." The alternative path clearly represents authority to make loan guarantees independent of and notwithstanding the earlier, more general FCRA requirements.

Letter from the General Counsel of the GAO to the Chairman and Ranking Minority Member of the House Subcommittee on Energy and Water Development, Letter B-308715 (Apr. 20, 2007).

Alternatively, Congress could act to establish a multi-year volume level for the

Title XVII Loan Guarantee Program, which would provide predictability regarding the future loan volume available. Another approach might be for Congress to establish a rolling volume cap over a three year period, far enough into the future to provide project planning certainty, and then take up an annual extension of the three year cap, as the program gains experience.

B. The Need for a Workable Financing Instrument

For new nuclear power plant development in the United States, Federal loan guarantees are an indispensable instrument to address a market financing gap that results from the combination of several factors including, (i) the prior nuclear plant construction cycle that was burdened by regulatory uncertainty and resulting delays and cost overruns; (ii) perceived uncertainty of an untested (though certainly improved) licensing system; (iii) perceived technology risk, and (iv) an institutional loss of understanding regarding the reality of nuclear financial risk in some elements of the financial community.

The loan guarantee program is intended to fill this financing gap by creating a non-recourse financing platform whereby energy companies with relatively modest market caps, particularly when compared to the capital costs of a new nuclear project, are allowed to leverage their limited equity in a manner not possible without the benefit of the guarantee. By requiring significant equity toward a project's cost, the program insures that only credit-worthy projects will apply.

However, to achieve this benefit, the loan guarantee must be a workable financing instrument. Unfortunately, the Proposed Rule, by (i) limiting the guarantee coverage to 90 percent, (ii) prohibiting *pari passu* security structures, and (iii) prohibiting "stripping," creates a financing instrument that will not support the financing of new nuclear plants in the United States.

Our largest concern surrounds the issue of the percentage of a project's debt the loan guarantee will cover. We note that Title XVII authorizes the DOE Secretary to issue guarantees up to "80 percent of the project cost of the facility that is the subject of the guarantee." Section 1702(c). Given the current financing gap in the market and in light of Congress's intent, we believe DOE would be fully justified in guaranteeing one hundred percent (100%) of a project's debt, up to the 80% of project cost threshold. However, in the NOPR, the Department insists that each project and each lender have a tranche of non-guaranteed, deeply subordinated debt.

The loan guarantee program is essential to the process of establishing a framework for future private financing once the first wave of nuclear plants "prove out" the NRC licensing process and a track record has been established for the first 3-5 plants put in operation for each of the five advanced reactor technologies that are being pursued. Moreover, providing 100% guarantee coverage of the debt is not only necessary because commercially viable financing is not available on an unguaranteed basis, but also because a 100% U.S. government guarantee will enable lenders and borrowers to maximize the efficiency of the existing marketplace. There is a deep, well-established market in government-guaranteed debt, and notwithstanding the fact that an underlying project involves nuclear energy or other advanced technology, this existing market provides a large amount of available capital and liquidity that can help make this Loan Guarantee Program efficient and successful. However, this will not be possible, if the DOE's rules require that there be a tranche of non-guaranteed debt and that each lender hold a *pro rata* share of this non-guaranteed debt.

The U.S. financial markets are highly efficient at matching the right capital to the right risk profile. Safe investments, such as U.S. government obligations, go to those who apply a

premium to that safety. Risky investments go to those investors willing to accept risk in exchange for an appropriate reward. Any program that attempts to tie risky, non-guaranteed loans to safe, government-backed loans fails to recognize the market's preference for self-selection. Such a program has the curse of making every investor unhappy. The risk averse investor is forced to take risk, and those with an appetite for more risk are forced to buy guaranteed paper. Many of the investors in the government-guaranteed debt markets actually have charter or regulatory restrictions that prohibit them from investing in riskier securities. Thus, a "no stripping" requirement and the requirement for a non-guaranteed tranche of debt would erect a significant barrier to the ability to access this market, because many of these market participants cannot, or will not want to, take on the risks of non-guaranteed debt. This result is counter to the policy objectives of Title XVII.

Moreover, the "no stripping" requirement combined with the prohibition on *pari passu* security structures creates a form of "hybrid" debt for which there is no natural, existing market. At best, market participants would incur significantly higher average cost of financing, as well as unnecessary transaction costs to achieve project structures that would enable the project's debt to be placed with its appropriate constituents in the existing marketplace. Such structures would not only be inefficient, but also could amount to a form of "synthetic" stripping that undercuts the purpose of the requirement. At worst, the barriers to access to the capital markets could be insurmountable. Either way, the "hybrid" debt structure runs counter to the purposes of Title XVII, does nothing to enhance the Secretary's ability to issue guarantees based on a reasonable prospect of repayment, and unnecessarily increases costs to electricity customers.

The "no stripping" requirement, along with the requirement for a non-guaranteed tranche of debt appears to have been proposed with the intent to encourage a rigorous evaluation of the

creditworthiness of a project. However, the no stripping provision is a very poor proxy requirement for determining project creditworthiness, because the feasibility of the "hybrid" credit instrument is limited by the lack of a market for such instruments, as described above. The restrictions on achieving a 100% guaranteed instrument, combined with the prohibition on *pari passu* security structures, render the loan guarantee program unusable for new nuclear power. Moreover, allowing stripping alone would not lead to a viable loan guarantee program. Rather than such mechanisms, DOE should focus on assessing the financial strength of the underlying project.

C. The Best Strategies for Minimizing Risk to Taxpayers

As already noted, the Proposed Rule imposes a requirement for a non-guaranteed tranche of debt as well as a "no stripping" limitation requiring that the same lender hold *pro rata* amounts of guaranteed and non-guaranteed debt. In addition, the Proposed Rule would prohibit a debt structure with a government guarantee of 100% of project debt, but permit the guarantee of 90% of project debt up to 80% of project cost, thereby permitting a project lending structure with 88.88% total debt (90% of which is guaranteed) and just 11.12% equity. It appears that these requirements are being imposed in an effort to mitigate the risk of default and minimize the risk to taxpayers, but in fact, these requirements are not effective in achieving those objectives. Rather, DOE should consider other alternatives for mitigating risk.

1. Guaranteeing 100% of Debt Is Not More Risky Than Guaranteeing 90% of Debt When Project Equity is Considered

The effort in the Proposed Rule to avoid any guarantee of 100% of project debt is delinquent in meeting its apparent objective, which presumably is to mitigate risk to taxpayers. It also is inconsistent with the statute. DOE's Interim Guidelines for the Loan Guarantee Program provided a preference for guaranteeing 80% of project debt, which itself was limited to

80% of project cost, 71 Fed. Reg. 46451 (Aug. 14, 2006), and this was met with considerable resistance based upon the apparent intent and plain language of Title XVII which unambiguously provided for guarantees to be issued up to 80% of project cost. (Section 1702(c) of EPAct 2005.) Under the Proposed Rule, DOE could issue a guarantee that conformed to the statutory mandate allowing a guarantee 80% of project cost, but it does so by limiting the guarantee to 90% of project debt and allowing project debt to exceed 80% of project cost. Hence, rather than simply guaranteeing $80 of a $100 project with $20 in equity, the Proposed Rule would allow a guarantee of $80 on the same $100 project, where the project borrows an additional $8.88 and reduces the equity contribution to $11.12.

This approach does not effectively mitigate risk, but rather it would actually increase project risk by reducing the equity commitment necessary from the parties at greatest risk and, therefore, with the greatest motivation to reduce project risk. Moreover, project risk is increased by replacing equity with debt that is likely to be high cost, that will increase the project's annual fixed charge, and that is subject to default (as compared to equity whose return is residual and which is not subject to placing the project in default). The flawed logic in the rule is perhaps best exemplified by flipping the equations. Would anyone reasonably think that guaranteeing 100% of debt would involve more risk if debt were just 20% of project cost and the equity contribution were 80%? By the same token, a 100% guarantee of a project with debt at 80% of project cost likely involves less risk to the government than guaranteeing 90% of the debt at 88.88% of project cost. Little of value is accomplished by insisting upon non-guaranteed debt in lieu of equity that would otherwise be provided.

In assessing risk, it is more appropriate for DOE to assess the equity contribution that will be at risk. For a two unit nuclear project that might involve project costs and interest during

construction of $7-10 billion, the equity contribution of 20% of Project Cost would be in the range of $1.5-2.0 billion. Certainly, the market forces surrounding a $2 billion equity commitment are a much more powerful tool for assuring discipline in the financing of projects than insisting that lenders assume a portion of non-guaranteed project risk. Thus, a proper assessment of the equity investment being made provides the better mechanism for mitigating risk and minimizing the exposure of taxpayers.

2. DOE Can Rely Upon Outside Experts to Perform the Necessary Due Diligence

DOE can and should retain outside legal, technical and financial experts to supplement its internal expertise in performing the necessary due diligence and assessing project risks. The reasonable costs and expenses of these experts would normally be borne by the sponsors and constitute part of project costs. In most instances, these are the same legal, technical and financial experts that commercial lenders would engage to perform the necessary due diligence. DOE would be better off retaining and working with these experts directly than indirectly relying on their work representing the lenders in the unguaranteed tranche. There is no reason to believe that these experts would bring any less professionalism to their task because they were retained by DOE rather than the lenders.

3. DOE Can Rely Upon Lenders to Mitigate Risk

Even without requiring a non-guaranteed tranche of debt, and without any regulations requiring that lenders assume a duty of care regarding the loan, DOE should expect that lenders will exercise a high degree of care in placing debt that is subject to a federal loan guarantee. Large financial institutions have reputations to protect, have disciplined internal processes for evaluating risk and assessing credit quality, and would not have any interest in participating in any loans that might be viewed as having increased default risk, without regard to the protections

afforded by a federal loan guarantee. Clearly, the federal loan guarantee facilitates a lender's ability to take some risk, which is the purpose of Title XVII. But, in viewing this fact, DOE should take into account the considerable efforts that lenders will undertake to nevertheless assure that any such loans are creditworthy. DOE can expect that an Administrative Agent or Lending Agent which facilitates the financing of a given project will be hyper-concerned about its reputation as well as the risk of litigation, in which an agent might be held liable to other lenders. These mechanisms alone will assure that there is a high degree of discipline among lenders for the first wave of nuclear power projects. A non-guaranteed tranche of debt therefore is unnecessary to impose market discipline.

4. Allowing No Other Project Debt To Exist With *Pari Passu* Liens on the Project Could Increase Risk to Taxpayers

Tranches of debt that are non-guaranteed by the federal government may properly be viewed as having a positive impact on overall project risk to the government. However, DOE's rules must recognize that many such debt arrangements would require *pari passu* liens on the project. The best illustration of this fact is where a project is able to obtain long-term vendor or other financing to acquire assets or "property" for a project, such as long-lead time equipment, prior to ever securing any financing that is backed by a federal government guarantee. Under such a hypothetical scenario, the Project Sponsors might have secured $500 million in such financing. Thus, for their project with $5 billion in total project cost, the Project Sponsors would request a loan guarantee for $3.5 billion or just 70% of project cost, leaving in place the 10% financed earlier by others, rather than requesting a guarantee of $4 billion or 80% of project cost and paying off the $500 million debt holder. Financing the higher amount and paying off the $500 million debt-holder would only increase risk to the government, and if the government allowed the $500 million to remain in place with a *pari passu* lien on the project, the

government's security position for its $3.5 billion in guaranteed debt would be precisely the same as if it maintained its "superior" rights with respect to recovery for a guarantee of $4 billion. In this type of instance, the government's position is enhanced by reducing its risk profile while at the same time maintaining an equivalent security profile.

The Proposed Rule does not allow for any circumstances where another lender might have liens upon property related to a project that is equal to the government's lien. Presumably, these requirements arise because of Section 1702(g)(2)(B) of EPAct 2005, which provides:

> (B) SUPERIORITY OF RIGHTS.—The rights of the Secretary, with respect to any property acquired pursuant to a guarantee or related agreements, shall be superior to the rights of any other person with respect to the property.

42 U.S.C. § 16512.

The statute does not, however, restrain DOE's ability to adopt a sensible rule under the circumstances presented in the example above. At issue in this instance would be a prior financing lien on assets of the project acquired prior to the issuance of the DOE guarantee. As such, DOE has the statutory discretion to consider alternative arrangements, rather than insisting upon "superior rights" when such property is co-mingled to serve as collateral with other property (financed with guaranteed debt) that is necessary to complete the project. In exercising its discretion, the government should recognize the practical realities that in project finance, lenders will require liens on the entire operating project as opposed to specific items of property acquired through one loan or another. Thus, both the lenders under the government guaranteed loan and those under the prior loan should be entitled to equal *pari passu* liens on the entire project. That such an approach is statutorily permitted is evidenced by the prior Department of Energy regulations implementing virtually identical "superior rights" language in the Loan Guarantees for Alternative Fuel Demonstration Facilities program. Those regulations provided

that, in the case of prior lien creditors, DOE could enter into inter-creditor arrangements with the first lien creditors.[1] If the "superior rights" language could permit such collateral sharing arrangements under the 1980 regulations, the same language should permit the same or similar collateral sharing arrangements in the Title XVII program.

5. If Structural Mechanisms are Desired to Mitigate Program Risk, Limited Loan Terms Should Facilitate a 100% Guarantee of Project Debt

If DOE insists upon requiring a structural mechanism as an alternative to the perceived risk mitigation benefits of requiring a non-guaranteed tranche of debt, then it should allow for a 100% guarantee of project debt, where the borrowers and lenders agree to a limited guarantee term, much shorter than the 90% of project life or 30 years permitted by statute and DOE's rules. For example, if the proposed term of the guarantee is instead for the period of construction (3-5 years) plus a period of operations (*e.g.*, 5 to 10 years), then the borrowers and lenders will be forced to exercise considerable discipline to facilitate either the expiration of the guarantee or

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[1] Section 1702(g)(2)(B) is identical for all intents and purposes to the last sentence of 42 U.S.C. § 5919(g)(2) which was enacted in 1978 as part of the Loan Guarantees for Alternative Fuel Demonstration Facilities program. DOE's regulations implementing that provision provided as follows:

> [I]f any of the assets offered by the borrower as collateral security for the guarantee are subject to prior financing liens by other creditors, DOE will require that such prior lien creditors be removed or an acceptable legal arrangement be made with such prior lien creditors, where DOE will be protected in the event of default. An arrangement of this nature must be in the form of written agreement between DOE and the prior lien creditors, and provide the following conditions:
>
> (i) Ample notice of default and collateral security sale;
>
> (ii) A plan of liquidation offering mutual protection to DOE and other creditors; and
>
> (iii) An option on the part of DOE, which would be assignable to a third party, to have the first lien debt payable according to the original installment terms (even after default) if the project operation is undertaken by DOE or an acceptable third party, or on behalf of or through DOE.

10 C.F.R. § 796.11(a)(9) (45 Fed. Reg. 15478 (1980) (removed 60 Fed. Reg. 49196 (1995)).

These regulations clearly acknowledged the possibility that project collateral security might be subject to prior liens granted to the other creditors and allowed that these liens might continue subject to "an acceptable arrangement" to protect DOE, whereby the creditor would agree, *inter alia*, to "[a] plan of liquidation offering mutual protection for DOE and other creditors." Id. In other words, both DOE and the prior creditors would get "equal" or *pari passu* treatment.

an anticipated re-finance of the project early during project life. This would achieve the "structural" or embedded "market-driven" discipline toward credit quality that is a misperceived benefit of the proposed non-guaranteed tranche of debt.

D. The Credit Subsidy Cost Must Be Transparent and Commercially Reasonable

The loan guarantee program should provide a transparent methodology for calculating the subsidy cost, and such costs should be reasonable and commercially viable (in line with those of other Federal loan guarantee programs). Sponsors need a reasonably accurate estimate of the subsidy cost early in the development process in order to support these multi-billion dollar investment decisions. The Proposed Rule provides no methodology for determining the Credit Subsidy Cost and administrative fees for the guarantee, making the value of the guarantee difficult to determine in advance. Given the extended, multi-step negotiation process required for the award of a guarantee, a significant commitment of time and development funds will be required and the project schedule and cost may be adversely impacted if a mutually acceptable subsidy cost is not both easily ascertainable and commercially viable early in the process. For regulated utility sponsors, negotiation with state regulatory bodies concerning recovery of project costs will be impossible without some (reasonable) estimate of subsidy cost. Other federally sponsored guarantee programs (e.g., Ex-Im Bank, OPIC) are comparatively more transparent.

We believe that it is critical that DOE establish expeditiously, with full opportunity for stakeholder comment and input, a transparent methodology for calculating the Credit Subsidy Cost. This is indispensable in order to provide the level of certainty and predictability necessary for companies, their boards and the financial community to make timely investment and financing decisions for these multi-billion dollar projects.

III. DISCUSSION OF THE ISSUES CRITICAL TO PUBLIC POWER PARTICIPANTS IN NUCLEAR PROJECTS

A. DOE Should Not Impose Requirements that Go Beyond the Limitations Set Forth in the Internal Revenue Code

The Proposed Rule includes a prohibition against issuing any loan guarantees that finance directly or indirectly, any tax exempt debt obligations. This provision is unnecessarily overbroad, and appears to establish new policy that negates provisions of current law on tax exempt financing. Under some circumstances, the terms of 26 U.S.C. § 149(b) would apply so as to eliminate the tax exempt status of the debt obligations. However, Congress has created several exceptions in 26 U.S.C. § 149(b)(3)(A), which permit loan guarantees to apply to tax exempt debt obligations under certain conditions. Title XVII loan guarantees should be available for debt obligations if they qualify under such a statutory exception in existence at the time of the loan guarantee agreement. Thus, the prohibition in Section 609.10(d)(7) of the Proposed Rule should be amended by adding the proviso ", unless such debt obligations fall within one of the exceptions enumerated in 26 U.S.C. § 149(b)(3)(A), or other similar law;".

B. DOE Should Allow for an Application from Each Sponsor that Plans to Obtain Financing for an Undivided Ownership Interest in a Project

There is a long history in the United States of partnerships between public power entities and private industry that have facilitated the construction of new nuclear power plants. In addition, participation by public power entities may enhance local stakeholder support and can help mitigate some project risks. Moreover, the potential for public power entities joining new plant development efforts should be viewed positively by the government as consistent with the spirit of public-private partnership and risk-sharing that underscores much of the effort to jump-start a nuclear renaissance through development of a new generation of advanced nuclear technology.

Thus, whether public power entities choose to pursue loan guarantees for non-tax exempt debt, or whether they are permitted by the Internal Revenue Code to obtain Title XVII loan guarantees for tax exempt debt, the DOE's rules should provide the flexibility for separate applications and guarantees to be issued to public power participants. This may be necessary, because such entities will have different risk profiles and different needs regarding loan structures than their for-profit counterparts. Moreover, the separate loan arrangements by these entities would likely be very high dollar amounts that are secured by an undivided ownership interest in the project. For example, an 80% loan for a public power entity's 25% interest in a $4 billion project, would still involve $1 billion in project cost, and an $800 million guarantee. Viewed in this context, it makes sense to allow for a separate application process, separate evaluation of the loan's risk profile, and separate calculation of the Credit Subsidy Cost.

C. The Rules Should Permit Alternative Proposals from Public Power Entities That Include Ratepayer Commitments But Do Not Meet the "Equity" Requirements Applicable to Private Entities

Special rules should apply with regard to the requirement for "equity" contributions when considering Applications involving sponsors that are public power entities. Public power entities do not have investors that contribute "equity," they only have ratepayers that pay for the system costs incurred to generate and deliver electricity. Thus, these entities routinely finance 100% of the cost of projects, because lenders are willing to rely on the ability of the borrower to raise rates to cover any shortfall in revenues for purposes of paying debt service. Moreover, many such entities have very high quality credit ratings. DOE should permit such entities to arrange for debt financing to secure funds for the non-guaranteed portion of their Project Cost. Such debt would undoubtedly be backed by a public power entity's ratepayers, and as such, it should be treated as the "equity" contribution for a public power entity.

IV. DISCUSSION OF ADDITIONAL IMPORTANT ISSUES

A. DOE Should Adopt a Flexible "Open" Application Process for Large, Multi-Year Projects Involving More Than $2 billion and/or 1,000 MW

The development of a new advanced nuclear reactor project involves several billion dollars and a preparation and licensing process of at least 4-5 years followed by a 3-5 year construction period. The timelines for these projects are market-driven, either by obligations to meet demand growth (for regulated utilities) or to supply the requirements of load serving entities (for merchant generators). A major multi-year project of this nature is simply not amenable to undefined solicitation cycles that are at the discretion of DOE, or that are based upon volume caps or other requirements set annually, and that bear no relation to the planning needs of a large project. Rather, such projects require an "open" application process, where Project Sponsors are able to make inquires and initiate either an optional Pre-Application or an Application at the appropriate time selected by the Project Sponsors and their advisors.

For some, this may need to occur very early in the development process in order to facilitate the ability of a Project Sponsor to place orders and make commitments for long lead time equipment and pre-construction activities. Thus, the Proposed Rule should permit applications to be made once the NRC has docketed an Application for COL, *i.e.*, any time after the NRC has concluded that the Application for the COL is administratively complete. At this point in time, the details of the project are sufficiently complete to support the NRC licensing process, and the Project Sponsors will be making decisions as to whether or not to undertake pre-construction activities that may require financings, or at least require funding that cannot be approved by the Project Sponsors themselves without detailed insight into the prospects for future financing activities. For others, the Project Sponsors may find it more desirable to defer the time and expense of the loan guarantee application process to later in the project time line.

This should also be acceptable to DOE, because such Applications should involve projects that are further along in the planning and implementation processes.

Similarly, DOE should allow flexibility in the type of "commitment" provided by DOE in advance of the planned financial close of guaranteed debt. For some applicants, it may be acceptable to have a very conditional commitment that is non-binding. However, others may require a conditional commitment that becomes binding once the conditions precedent are satisfied and may be willing to make an advance payment of the Credit Subsidy Cost, subject to refund in the event that the financing does not close, in order to secure such a binding conditional commitment. DOE's rules should allow either approach, because "one size" will not fit all.

B. DOE Should Adopt Practices That Are Customary in the Marketplace for Project Finance

1. Project Costs Should Include Items Such as Fees That are Traditionally Financed in Large Commercial Power Generation Projects

The "Project Cost" taken into account for purposes of assessing the guarantee amount should include all costs routinely included by project lenders when arranging for the financing of a complex, multi-billion dollar industrial project. For example, DOE should not exclude administrative costs and fees charged to the borrower in connection with a loan (by DOE or by lenders). In addition, the "Credit Subsidy Cost" is a borrower fee that would customarily be included as a Project Cost when assessing debt and equity. At a minimum, this fee should be recognized as an additional "equity" contribution by the borrower when assessing borrower commitment and risk.

The rule also should explicitly define Project Costs to include costs such as the fair market value of land, goods and services, and equipment that is owned or acquired prior to the financial closing for the guaranteed loan and contributed "in kind" by the borrower. Such costs

may include, long-lead time equipment, the value of existing site and improvements, engineering and design performed by the borrower, *etc.*

2. DOE Should Recognize the Efficiency and Desirability of Having an Administrative Agent or Lending Agent With Responsibility for a Loan

In order to efficiently obtain access to capital for purposes of loans to projects under the program, borrowers will likely select a bank or underwriter to act as Administrative Agent or Lending Agent with responsibility for finding other lenders and syndicating the debt. Thus, any monitoring, reporting or servicing duties imposed should be limited to the Administrative Agent, which can effectively exercise such functions, whereas spreading responsibility among multiple lenders will only dilute accountability. In addition, imposing such requirements on all lenders will restrict access to capital and impose unreasonable burdens on all lenders. Similarly, restrictions on assignment, transferability, *etc.*, should be removed, because they are unnecessary (given the Administrative Agent's role), and they unreasonably restrict the marketability of the debt and efficient access to capital. Finally, DOE's rules should recognize that lenders will exercise diligence and minimize risk to lenders and the government in facilitating loans, but they cannot be expected to assume an affirmative obligation for a "high level of care and diligence," which is inconsistent with standard and customary practices in the bank and capital markets.

C. The Definition of "General Use" Should be Based Upon Five Years of Operation of Any Given Reactor Design

For nuclear technologies, the definition of a technology that is in "general use" should be based upon five or more years of operation of any given new design (*e.g.*, an advanced reactor design that is separately certified by the NRC). Five years of operation is a more appropriate benchmark for nuclear projects, because there is a need for multiple refueling outages before companies will be comfortable that a given technology is "proven." In addition, many new technologies for large power projects have a "seasoning period" where aspects of less efficient

performance are improved upon. Five years allows for the true efficiency of units of each design to be established, and "general use" should be defined to include three or more units of a given design operating five years.

It is also worth noting that if the alternative based upon "five or more projects" were used, it is essential that the phrase "order for, installed in, or used in" be changed to "ordered for, installed in, and used in." For nuclear plants, ordering would take place many years before use, and an "order" arguably might be placed before financing is ever secured for the project. Thus, a technology might become "disqualified" before construction begins on the first unit. In addition, "installation" of the unit occurs before the start-up and low power testing that is a prerequisite to commercial operation. For nuclear technologies, only actual "use" of the technology in an operating commercial project is a meaningful data point for the purpose of defining "general use."

D. Other Forms of Government Assistance Should Be Viewed Positively

For large commercial projects like any nuclear power plant, a successful project will require a multi-year development process that includes positive participation from many different stakeholders, including the local community and host state. Assistance from state and local governments, in particular, should be viewed favorably by DOE, because such assistance demonstrates local commitment to the project, increases likelihood of success, and reduces project risk to the federal government. Thus, any state and local government support should be encouraged, not discouraged. In addition, foreign governmental assistance should be viewed very favorably, because it similarly represents foreign government commitment to a project and presumably the project's technology.

Other federal incentives, such as production tax credits, serve to mitigate market risk, and thus should be viewed favorably in the project credit risk analysis. Congress enacted multiple

forms of federal incentives for new nuclear generating facilities, recognizing that these incentives are complementary. DOE should not seek to administratively restrict the interaction of these provisions. Other forms of assistance improve project economics and reduce demand on, and risk to, the DOE Loan Guarantee Program.